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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,055	09/30/2003	Adrian P. Stephens	42390.P17446	8084
59796	7590	01/25/2008		
INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER NGUYEN, HANH N	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/677,055

Applicant(s)

STEPHENS ET AL.

Examiner

Hanh Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 1/9/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 6, 7, 18, 23, 24, 30, 35-37, 39, 43, 44, 46, 48, 52-54, 58 and 59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 18, 23, 30, 35, 37, 39, 43, 48, 52, 54 and 58 is/are rejected.
- 7) ☒ Claim(s) 24, 36, 44, 46, 53, 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 18, 23, 35, 43, 48, 52, 54 and 58 are rejected under 35 USC 103(a) as being unpatentable over Proctor, Jr. (US pat. 6,925,070 B2) in view of Milton et al. (Us pat. 6,721,333 B1).

Regarding claims 1, 18, 48 and 54, Proctor, Jr. discloses a method comprising transmitting a frame containing a single preamble and a header over an air interface at a first modulation rate; and transmitting, in a same frame as the header, a consolidated payload over the air interface at a second modulation rate different than the first modulation rate (see fig.3, col.9, lines 1-55; transmitting frame 3 including a preamble 320, destination address 322; data payload 330 and modulation type 324. The preamble 320 and data payload 330 are modulated at different rates and in the same frame); wherein the consolidated payload includes multiple service data units (payload 330(fig.3) is received as data block 205 divided into sub-blocks/sub-packets of data,

Art Unit: 2616

col.8, lines 5-10 and fig.2 & col.12, lines 48-53). Proctor, Jr. disclose does not the consolidated payload includes information to enable a receiver to determine when an end of each of the multiple service data units will occur. Milton et al. discloses in fig.6, a transmission of frame 604 comprising multiple packets 606, 608, 610 (the consolidated packet comprises multiple SDUs) separated by delimiter 612 (information). Each of packets 606, 608 and 610 is prepended with a byte indicating the length of the respective packet. Further, the frame header 628 comprises value indicating the number of packets, each followed by N bytes which represents the length of different packets; See col.3, line 35 to col.4, line 50). Therefore, it would have been obvious to one ordinary skilled in the art to use delimiters 612 and packets 606-610 of Milton et al. in the frame 3 of Proctor, Jr so that the end of each sub-packet in the frame 3 is determined. The motivation is to reduce data overhead, data congestion by limiting the size of each service data unit.

IN claims 6, 23, 35, 43, 52 and 58, the limitations of these claims have been addressed by the combination of Proctor, Jr. in view of Milton et al. (see Milton et al. in fig.6).

Claims 30, 37, 39 are rejected under 35 USC 103(a) as being unpatentable over Proctor Jr. in view of Milton et al. (Us pat. 6,721,333 B1), and further in view of Ryan (US pat. 7,065,036 B1).

Regarding claims 30 and 39, Proctor et al. and Milton et al. disclose most of limitations as shown in claims 1, 18, 48, 54. Proctor et al. and Milton et al. do not disclose a physical device coupled to a MAC device to transmit header and payload at

Art Unit: 2616

different modulation rates. Ryan discloses in fig.1, physical device 106 is coupled to MAC device 112 to transmit modulated data via radio link 132 (see col.3, lines 50-55 and col.4, lines 5-15). Therefore, it would have been obvious to one skilled in the art to implement a MAC device and a physical device of Ryan into Proctor Jr. to transmit multiple data service units.

In claim 37, Proctor discloses one or more antennae, coupled to the physical device, which is operable to provide an interface between the air interface and the physical device (see fig.1, antennas 16-1, 16-2 coupled to access units 14-1, 14-2 function as an air interface).

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Proctor Jr. in view of Milton et al. (Us pat. 6,721,333 B1), and further in view of Hourunranta et al. (US pat. 6,959,020 B1).

In claim 7, Proctor Jr. does not disclose a particular delimiter including a validation field , which enables the receiver to determine whether the indication of the length in the particular delimiter is received correctly. Hourunranta et al. discloses a method of error detection in receiving multiplexed signals described in fig.5 and fig.8 (in fig.5, step 50-51, 52, col.6, lines 30-55; packet delimiter is analyzed to determine errors such as boundaries between data blocks. Further in fig.8, steps 81, 84, 85, 86; col.8, lines 1-14; based on a found flag and CRC bits, checking the expected packet length to determine error indication such as ILLEGAL_BIT_COMBINATION). Therefore, it would have been obvious to apply the teaching of Hourunranta et al. into Proctor so that the

Art Unit: 2616

receiver can determine whether a particular SDU is received correctly based on the delimiter checking.

Allowable Subject Matter

Claims 24, 36, 44, 46, 53, 59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Simon et al. (US pat. 5,987,034).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Thursday from 8:30 to 4:30. The examiner can also be reached on alternate

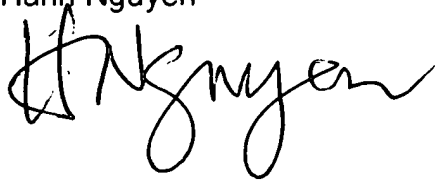
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2616

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'Hanh Nguyen', with a stylized, cursive script.

**HANH NGUYEN
PRIMARY EXAMINER**